Georgia (Fort Valley State University, University of Georgia Combined)

Plan of Work for 2023-2027

Status: Final (Approved 9/7/2022)

Executive Summary Overview

The Georgia Plan of Work (POW) encompasses a five-year period beginning October 1, 2022. The plan addresses major agricultural issues as well as many other problems facing rural and urban areas, the environment, families and youth. The plan represents a coordinated effort between the state's 1890 and 1862 land-grant institutions, Fort Valley State University (FVSU) and the University of Georgia (UGA), and includes joint planning between Experiment Stations and Cooperative Extension units at both universities.

Georgia, one of the original 13 colonies, has a land area of 57,701 square miles and a water area of 1,706 square miles, which makes it the largest state east of the Mississippi River (21th overall). Georgia falls within five major physiographic regions: the Blue Ridge Mountains in the northeast; the Ridge and Valley Province and the Cumberland Plateau in the northwest; the Piedmont across central Georgia; and the Coastal Plain in the south. Elevations range from sea level to 4,784 feet at Brasstown Bald in the Blue Ridge Mountains.

The 2020 census estimated Georgia's population was 10,711,908 and reported 23.8% of Georgians are under age 18 and 13.9% are 65 or older. According to the census,51.9% of Georgians identify themselves as white/Caucasian, 31% as black/African-American, 4.5% as Asian,.5% as American Indian/Alaska Native, .1% as Native Hawaiian/Pacific Islander, and 6.9% as more than one race. It was also reported that 10.5% of Georgians identify as Hispanic or Latino.

Georgia's Cooperative Extension program has 167 offices, with programming in all of Georgia's 159 counties. FVSU and UGA personnel are housed jointly in county offices. Extension delivers programming in Agriculture and Natural Resources, Family and Consumer Sciences, and 4-H Youth Development as both individual county efforts and as multicounty programs. State faculty members deliver training to county agents and programming directly to clientele, when appropriate.

FVSU and UGA research programs are conducted through the Agricultural Experiment Station system. Georgia has several campuses throughout the state; its four largest are located in Athens, Fort Valley, Tifton and Griffin. Georgia has eleven research and education centers strategically located throughout the state.

This joint Plan of Work was developed around core programs and targeted issues. Using a structured program development system, Georgia develops core program directions and identifies targeted issues. The Georgia program development model is a multistep process that is operational every year. The model includes a method for assessing needs and identifying problems. It also includes program

evaluation to determine impact. The Georgia program development model works in unison with multiple advisory systems at both county and state levels.

Input solicited directly from academic departments at FVSU's College of Agriculture, Family Sciences and Technology as well as UGA's College of Agricultural and Environmental Sciences (CAES) and College of Family and Consumer Sciences as part of the annual needs assessment is an integral part of developing this Plan of Work. Faculty members associated with this plan are working on cutting-edge programs. They provide information and input from both the academic literature and personal knowledge. This input is equally important to program development as is a strong advisory system.

The Georgia Federal Plan of Work does not attempt to capture all of the work of the colleges' faculty members. It is intended to document the plans and actions of the faculty members receiving specific formula funds. The majority of these funds are used to support state-level core programs. These core programs cover a wide range of topics, including traditional animal and plant production, positive youth and family development, urban agriculture, personal health and well- being, and emerging issues, such as integrated precision agriculture and biofuels.

The goals of these programs are to demonstrate short- and long-term impact. However, the greatest impacts of these core programs are the foundations created to support and leverage additional resources beyond state-matching funds. The additional state funding, county funding, grants and gifts leveraged as a direct result of the work in this plan may create the greatest final impact.

Most of Georgia's planned programs include outcome measures that track the output levels of leveraged programming. The outputs of these leveraged programs are considered a direct, short-term outcome of the core planned programs within the Georgia Federal Plan of Work.

The Georgia Federal Plan of Work is centered on eight planned programs. These work in conjunction with each other to address important issues on county, state, regional, national and global levels.

Animal Production

This plan of work will explore different areas of animal production and protection, focusing on the production of sheep, goats, dairy and beef cattle, swine, poultry, aquaculture, and small ruminants. Equine and bees are also included. Specific topics for this program include, but are not limited to: Georgia Beef Challenge, Master Cattleman's Program, profitability of dairy farming, swine intake regulation, IPM and evaluation of new forages and feeds.

Community, Home and Life Skills

This plan of work will explore issues related to home and life skills. Specific topics for this program include, but are not limited to: community development, economic development, indoor air quality, water quality, waste management, energy management, homebuyer education, consumer economics, financial literacy, and emergency preparedness.

Food Safety and Quality

This plan of work will explore different areas of food safety, focusing on food processing and storage, protection, and safety; plant production; and animal production and protection. Specific topics for this

program include, but are not limited to: consumer demand for food, food industry needs, and the food processing industry.

Health and Wellness

This plan of work will explore issues of chronic disease prevention and healthy lifestyles, focusing on weight control, physical activity, diabetes management and prevention, cardiovascular diseases prevention and cancer prevention to the public. Behavioral health including rural stress, farmer suicide, opioid misuse and general wellbeing are emerging issues in is area of work. A large focus of this program will be on the state's youth.

Plant Production

This plan of work will explore plant production and protection. Specific topics for this program include, but are not limited to: plant growth and crop production; plant diseases, weeds and pests; developing new breeding tools; soil quality; irrigation; plant pathology; genetics; entomology; IPM, harvest and post-harvest handling; conservation; cultural trends; and breeding programs that incorporate variability derived from interspecific hybrids from which new cultivars can be developed. Controlled environment production as well as vertical farming is an emerging issue in this area.

Sustainability, Conservation and the Environment

This plan of work will explore issues related to the sustainability and profitability of agriculture. Specific topics for this program include, but are not limited to: natural resource management, minimum tillage and cover crops; pesticide stewardship, value added products or production practices that can improve sustainability and profitability; investigation of niche markets in Georgia; financial accounting and reporting strategies; and alternate cultural practices that will protect, improve and maintain soil fertility.

Urban Agriculture

This plan of work will explore issues related to urban agriculture. Specific topics for this program include, but are not limited to: water conservation technology and training; turf disease identification and management; IPM; development of new cost estimating and job bidding software for landscape installation; and Master Gardener programs. Support for urban farming, school and community gardens, and urban green spaces are a part of this issue area.

Youth and Family Development

This plan of work will explore positive youth and family development. Specific topics for this program include, but are not limited to: parenting; relationships, child and elderly care; 4-H and youth programming.

The Georgia Federal Plan of Work is designed to meet the emerging issues of our communities, support the sustainability and profitability of the agriculture industry and provide educational programs for families and youth. Major components in the planned program specifically target youth and families at risk. Other components target small producers, limited resources farmers and rural communities.

Merit and Scientific Peer Review Processes

UGA CAES and FVSU independently and collaboratively conduct periodic, extensive and comprehensive program reviews of their research and Extension programs. These reviews collect both internal and external input, including input from faculty and staff, clientele, alumni and stakeholder groups. The results of these reviews have been used to formulate this Plan of Work. Additionally, the universities have sought guidance from the UGA CAES Advisory System and the FVSU CAFST Advisory Board through their critical review of programs and suggestions for improvements.

This Plan of Work is under continuous review by the Program Development Team, which is comprised of program development specialists and coordinators from Agriculture and Natural Resources, Family and Consumer Sciences and 4- H Youth Development, as well as faculty from both FVSU and UGA. This review is an ongoing process, and future annual reviews and changes to the Plan of Work will be the responsibility of this team.

The research portion of the Plan of Work undergoes scientific peer review prior to each project being submitted. All scientists are required to have active projects for expenditures to be made. Each project is peer-reviewed by both internal and external reviewers and must be approved by the appropriate dean and director prior to submission to the National Institute of Food and Agriculture.

Stakeholder input: Action Taken to Seek Stakeholder Input

Surveys are used at the planned program level. Information is collected and shared as part of the program development process. The advisory system requires that faculty seek participation by nontraditional stakeholder individuals. Georgia's advisory system also recommends that advisory committee membership reflect the demographic composition of the community.

Stakeholder input: Methods to Identify Individuals and Groups

Faculty and administration identify organizations made up of direct stakeholders or potential collaborators in addressing community issues. Input is sought from stakeholders who have demonstrated their dedication to the activities of the college. County programs identify individuals with the ability to represent diverse current or potential stakeholder groups in the community. Race, ethnicity, income or communities of interest may be used to identify these groups.

Stakeholder input: Methods for Collecting Stakeholder Input

At the local level, advisory committees meet by program area to cumulatively identify issues; plan, execute and evaluate programs; and communicate results to the community.

When making hiring decisions, comments and recommendations of active stakeholders are solicited.

Stakeholder input: A Statement of How the Input Will Be Considered

Stakeholder input is an important part of Georgia's program development model. Stakeholder input is currently used for program planning and development purposes, and to identify and evaluate resource levels directed toward specific planned programs. Stakeholders are encouraged to participate in program implementation as a tool to understand the value and scope of the program. Stakeholders are also part of fund development at both the state and local levels.

Critical Issues

Animal Production

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

This critical issue integrates work to improve animal production systems including poultry, beef, dairy, pork, sheep, goat, lamb, equine, aquaculture, and pollinators for food, fiber, and leisure. This program works to develop production systems that are profitable as well as sustainable, and works closely with Sustainability Conservation & Environment, as well as Health and Wellness, to develop sustainable food systems. The key aspect of this planned program area is interdisciplinary work to solve difficult problems.

This program focuses on the following critical areas:

- Efficient production systems
- Animal health and well being
- Economic prosperity and marketing of animal production

Science Emphasis Area
Agroclimate Science, Education and Multicultural Alliances, Environmental Systems, Sustainable Agricultural Production Systems

Community, Home and Life Skills

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

Within this program, faculty members develop and disseminate research-based information to improve financial capability for Georgians at every age and stage of the life cycle. Focuses include knowledge, skills, and access to services in the areas of earning (i.e., employability skills, income taxes, job search/selection process), spending (i.e., budgeting, managing expenses, home ownership), saving/investing, borrowing, and protecting what's yours (insurance, estate planning, healthy homes).

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences

Food Safety & Quality

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

CDC estimates each year roughly 1 out of 6 Americans (48 million) gets sick, 128,000 are hospitalized, and 3,000 die from foodborne diseases. In recent years, Georgia had the highest incidence of salmonellosis of all 10 sites monitored by CDC's FoodNet system. Infants, young children, the elderly and those with weakened immune systems are most at risk of serious complications. Education for food

producers and processers, farmers, entrepreneurs, farmers markets, foodservice and consumers is critical to ensure a safe food supply and reduce incidence of foodborne illness.

This plan will provide research and education/instruction related to: a) processed foods, b) fruits, vegetables & nuts, c) meat, poultry & seafood, d) local foods, e) imported foods

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Food Safety

Health & Wellness

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

The UGA Extension Health and Wellness program provides up to date, research-based information with the goal of improving the health of individuals, families, and communities. Extension specialists train agents to provide education and training to adults and youth on health and wellness. Specialists also develop curricula, print media and online consumer resources, and program evaluations. 4-H and Family and Consumer Sciences faculty develop in-school and out of school programming to stimulate behavior changes among youth. Also included in this issue is bio-medical research.

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Human Nutrition, Youth Development

Plant Production

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

Projects under the Plant Production program encompass a broad array of targeted fields of study that include entomology, plant pathology, nematology, plant breeding and genetics, soil science, postharvest physiology & storage, irrigation technology, engineering, agricultural (micro- and macro-) economics, socioeconomics, food science and technology, resource conservation and ecological sciences, and resource sustainability. Many of these projects are cross-disciplinary and commodity-driven with the goals of improving a given crop's resource use, efficiency, sustainability, profitability, yields, and worker safety while reducing crop losses due to abiotic and biotic stress.

Science Emphasis Area

Agroclimate Science, Bioeconomy, Bioenergy, and Bioproducts, Education and Multicultural Alliances, Environmental Systems, Sustainable Agricultural Production Systems

Sustainability, Conservation and the Environment

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

This critical issue integrates work from the Animal Production and Plant Production to develop sustainable production systems that provide the food, fiber needed without destroying the ecosystems on which we depend.

This program works to develop production systems and economic information that are profitable as well as sustainable, and works closely with Food Safety as well as Health and Wellness to develop sustainable food systems. The key aspect of this planned program area is interdisciplinary work to solve difficult problems.

This program focuses on the following critical areas:

- Sustainable production systems
- Climate change mitigation and adaption
- Biodiversity on-farm and in the landscape
- Economic prosperity and value of ecosystem services
- Natural resources conservation

Science Emphasis Area
Agroclimate Science, Bioeconomy, Bioenergy, and Bioproducts, Education and Multicultural Alliances, Environmental Systems, Sustainable Agricultural Production Systems

Urban Agriculture

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

Urban agriculture poses unique challenges as an increasingly- urbanized Georgia population living in a finite area with finite resources. In Georgia, the population in urban and suburban areas continues to increase while putting additional strain on the state's natural resources. As populations grow, the needs for urban agriculture programming grow as well. Meeting the needs of these clients is the goal of the Urban Agriculture critical issue.

Included in this issue are controlled environment agriculture, turf, and ornamental plants.

Science Emphasis Area

Agroclimate Science, Bioeconomy, Bioenergy, and Bioproducts, Education and Multicultural Alliances, Environmental Systems, Sustainable Agricultural Production Systems

Youth & Family Development

Initiated on: Nov 26, 2019
State: Georgia

Term Length: Long-term (>5 years)

The Youth and Family Development critical issue provides up-to-date, research-based educational opportunities to assist individuals and their families in forming attitudes, acquiring knowledge, and

developing life skills that will assist them throughout their lifespan to be self-directing, productive, and contributing members of society.

Science Emphasis Area

Education and Multicultural Alliances, Family & Consumer Sciences, Youth Development